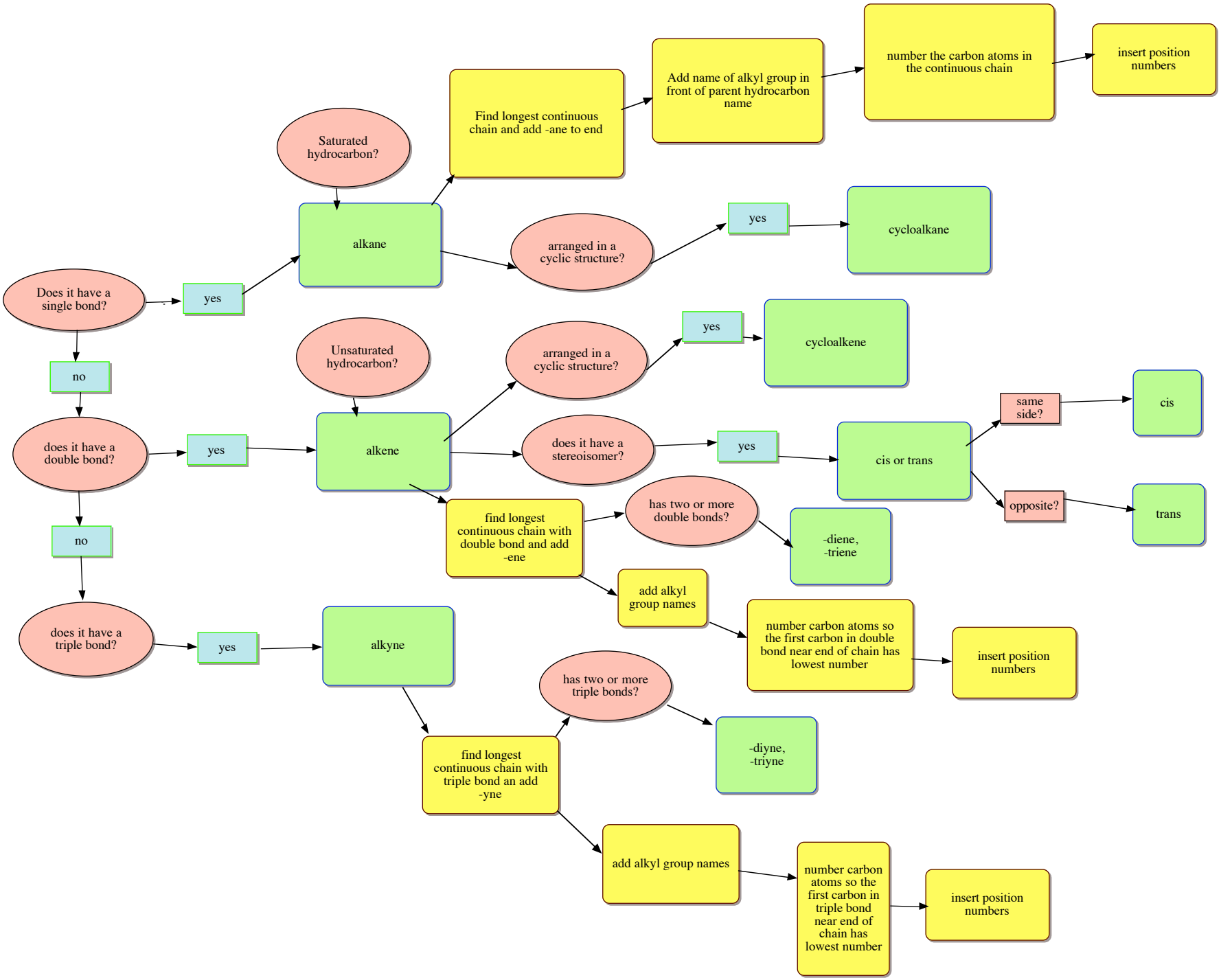
Does it have a single bond?
yes
alkane
Saturated hydrocarbon?
Find longest continuous chain and add -ane to end
Add name of alkyl group in front of parent hydrocarbon name
number the carbon atoms in the continuous chain
insert position numbers
arranged in a cyclic structure?
yes
cycloalkane
no
does it have a double bond?
yes
alkene
Unsaturated hydrocarbon?
arranged in a cyclic structure?
yes
cycloalkene
does it have a stereoisomer?
yes
cis or trans
same side?
cis
opposite?
trans
find longest continuous chain with double bond and add -ene
has two or more double bonds?
-diene, -triene
add alkyl group names
number carbon atoms so the first carbon in double bond near end of chain has lowest number
insert position numbers
no
does it have a triple bond?
yes
alkyne
has two or more triple bonds?
-diyne, -triyne
find longest continuous chain with triple bond an add -yne
add alkyl group names
number carbon atoms so the first carbon in triple bond near end of chain has lowest number
insert position numbers